## **EXHIBIT E**

Expert Report of William E. Longo, Ph.D., Prepared on Behalf of the Property Damage Asbestos Claimants Represented by the Law Firm of Dies & Hile, LLP

# Appendix E

State of Texas – Building Inspections

October 25, 2006

M40633 & M40632



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STATE OF TEXAS

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# SECTION 1

1001 Louisiana Street - Houston, Texas (aka: El Paso Bldg) Field Notes 9/19/06 - 9/20/06

Bldg. 32-story

Fireproofing on each floor applied to structural steel members, I beams and corrugated metal pan decking

Fireproofing overspray present on perimeter and core walls at the roof deck interface. Evidence of obvious fireproofing delamination observed in each of the penetrations made to the suspended ceiling during the plenum inspection.

The fireproofing present is a vermiculite based material with a taupe colored appearance (identified as a WR Grace product). Inspection of horizontal surfaces below the decking (in the plenum space), revealed that most surfaces are covered with a fine layer of dust and debris from disturbance and/or delamination of the fireproofing. In many areas, pea sizes to fist size chunks of fireproofing debris are also present.

The ceilings in the leasable/occupied areas of building are generally constructed of 5'x5' metal grid panels each containing 4 fiberglass ceiling tiles and a fluorescent light fixture. Access to the plenum is accomplished by removing the plastic light diffuser lense from the light and the rotating two levers in the lighting fixture which allow the light box to swing open in the frame (opposite its hinged side) towards the floor. This swinging action allows the fireproofing dust and debris (which have accumulated on top of the light) to fall into the occupied space below.

The acoustical plaster present was as a WR Grace product. The acoustical plaster present appears to be a spray applied material generally utilized on the ceilings in the central core area of the building and in the subterranean hallways connecting the subject building to other buildings.

According to the building engineers, renovation work has taken place thru-out the building (primarily consisting of modifications below the ceiling) but there have been spot abatements of the fireproofing (FP) as necessary. No widespread or full floor abatements have been conducted.

#### LOCATION OF CEILING PENETRATIONS AND INSPECTIONS AREAS

24<sup>th</sup> floor – adjacent to Data Room W2412B Photos 209-211

### LOCATION OF CEILING PENETRATIONS AND INSPECTIONS AREAS (cont)

21<sup>st</sup> floor – adjacent to Office N2132A Photos 212-218

17<sup>th</sup> floor – adjacent to Office S1704A Photos 219-221

17<sup>th</sup> floor – elevator lounge area Photos 222-225

12<sup>th</sup> floor – adjacent to Office E1244A Photos 226-231

6<sup>th</sup> floor – adjacent to Office S601 Photos 232-237

25th floor – north side of elevator lobby Photos 238-239

B floor – in tunnel at El Paso display case Photos 240-241

 $10^{th}$  floor – in W10111B small conference Rm. Photos 57-58

6<sup>th</sup> floor – in S603B ethics file room Photos 59-60

1<sup>st</sup> floor – in the pipe shaft outside stairwell D Photos 61-63

611 Walker Street - Houston, Texas (aka: Public Works Building and Annex) Field Notes 9/20/06

Bldg. 27-story plus 6-story annex

The original fireproofing was applied to structural steel members, I beams and corrugated metal pan decking in the main tower and in the adjoining annex. The fireproofing has since been abated from most of the tower building but is known to remain in the bathrooms on each floor (above hard plaster ceilings), on the exterior columns surrounding the building (encased in concrete) and certain pipe chases of that building. Abatement of the fireproofing has reportedly been completed in most areas of the annex as well with the exception of fireproofing in the bridge connecting the two buildings (located above a light weight concrete deck) and a few other sporadic inaccessible areas.

The fireproofing present is a vermiculite based material with a taupe colored appearance (identified as a WR Grace product). Inspection of horizontal surfaces below the decking (in the plenum space), revealed that most surfaces are covered with a fine layer of dust and debris from disturbance and/or delamination of the fireproofing. In many areas, pea sizes to fist size chunks of fireproofing debris are also present.

Note: a limited number of dust samples were collected from this building due to the location of the remaining original fireproofing located in limited access area

#### LOCATION OF CEILING PENETRATIONS AND INSPECTIONS AREAS

20<sup>th</sup> floor – in NE Fresh Air Shaft Photos 64-66

10<sup>th</sup> floor – in Room 1003 Photo 67

5<sup>th</sup> floor – in NE Fresh Air Shaft Photos 68-69

Annex 6<sup>th</sup> Floor – inside wall chase adjacent to Women's restroom Photos 70-72

#### Amarillo Air Terminal - Amarillo, Texas Field Notes 9/21/06

Terminal Bldg. 3-story

Originally fireproofing was applied to structural steel members, I beams and metal pan decking generally throughout the building. Over the course of many years the fireproofing has been abated from most of the building, but is known to remain in at least 3 major areas:

- a second floor airport storage area in Terminal 30
- · the basement mechanical room and adjacent areas in the main terminal, and
- the third floor office area and mechanical rooms in the main terminal

In the mechanical rooms the fireproofing is directly accessible to occupants since no suspended or rigid ceiling is present.

The fireproofing present is a vermiculite based material with a taupe colored appearance (identified as a WR Grace product). Inspection of horizontal surfaces below the decking (in the plenum space), revealed that most surfaces are covered with a fine layer of dust and debris from disturbance and/or delamination of the fireproofing. In many areas, pea sizes to fist size chunks of fireproofing debris are also present.

#### LOCATION OF CEILING PENETRATIONS AND INSPECTIONS AREAS

Concourse 30 - Second Level airport Storage (behind Air Host)
Photos 73-78

Main Terminal - Basement Level Mechanical Room - storage room area Photos 79-88

Main Terminal - Basement Level Mechanical Room - hallway outside Women's Rest room Photos 89-91

Main Terminal - 3<sup>rd</sup> Floor Air Handler Room Photos 92-94

Main Terminal - 3<sup>rd</sup> Floor Men's Rest Room Photos 95-100

1000 South Polk Street - Amarillo, Texas (aka: Bivins Building - Chamber of Commerce) Field Notes 9/21/06

Located in downtown Amarillo, originally this building was constructed as a residential home (3-story plus basement)

An acoustical treatment has been applied to certain section of the plaster ceilings on the basement, first and second floors (on or about 1971).

The plaster present is vermiculite based textured finish with a taupe colored appearance. Inspection of many of the horizontal surfaces observed below the ceiling are covered with a fine layer of dust and fine debris from delamination and/or disturbance of the acoustical plaster.

#### LOCATION OF CEILING PENETRATIONS AND INSPECTIONS AREAS

Basement Floor in back hallway at janitors storage area Photos 101-104

1<sup>st</sup> Floor City Counsel Chambers (above suspended ceiling) Photos 105-110

2<sup>nd</sup> Floor Hallway and copy area outside Conference Room Photos 111-114

# **SECTION 2**

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Materials Analytical Services Micro-Vac Dust Sampling Chain-of-Custody

Project No.: 16090601 Date: 9/25/06

Location: Various Texas Bldgs City/State: Houston and Ammarillo

*	Date			* Y 2 4	
,					
-	9/18/2006		Top of HVAC Duct	100	Fp
7	9/19/2006	9/19/2006 El Paso 21st Floor, adjacent to N2132A	Top of FLF supply duct	100	Д
က	9/19/2006	El Paso 17th Floor, adjacent to S1704A	Top of HVAC Duct	100	T.O.
4	9/19/2006	El Paso 17th Floor, elevator	Top of partion wall nxt to sofa	100	Ap
വ	9/19/2006	El Paso 12th Floor, adjacent to E1244A	Top of FLF supply duct	100	Fo
9	9/19/2006	El Paso 6th Floor, adjacent to S601	Top of HVAC Duct	100	c <del>u</del>
7	9/19/2006	El Paso 25th Floor, elevato	Top of wall sconce	100	Ap
8	9/19/2006	_	Top of display case	100	FD
6	9/20/2006	El Paso 10th Floor, in W1011B	Top of foil wrapped HVAC duct	37 mm	Fp - contact sample
10	9/20/2006	El Paso 6th Floor, in S603B	Top of FLF supply duct	37 mm	Fp - contact sample
11	9/20/2006	El Paso 1st Floor, in pipeshaft adj to stairwell D	Top of metal HVAC duct	37 mm	Fp - contact sample
1	9/20/2006	9/20/2006 PWB 20th Floor Fresh Air Shaft NE Corner	Top of metal pipe	100	FD
2	9/20/2006	PWB 6th Floor Annex Inside wall Chase	Top of metal pipe	100	Fp
<b>-</b>	9/21/2006	AAT Concourse 30 2nd floor, Airport Storage	Top of FLF	100	Fo
2	9/21/2006	AAT Concourse 30 2nd floor,	Top of FLF	37 mm	Fo - contact sample
3	9/21/2006	9/21/2006 AAT B floor, Mechanical Rm (supply area)	Top of Storage Shelf	100	Fp
4	9/21/2006		Top of Storage Shelf	37 mm	Fp - contact sample
5	9/21/2006	AAT B floor, Hallway outside	Top of FLF	100	1
9	9/21/2006	AAT 3rd floor, Mens Restroom	Top of HVAC duct	100	Fp
-	9/21/2006	Bivins B floor, in janitors storage area off hallway	Top of metal HVAC duct	100	Ap
2	9/21/2006	9/21/2006 Bivins B floor, in janitors storage area off hallway	Top of metal HVAC duct	37mm	Ap - contact sample
3	9/21/2006	Bivins 1st Floor, City Counsel Chambers	Top of 2X4 lay-in celling tile	100	Ap
4	9/21/2006	Bivins 2nd floor, copy area outside conference rm	Top of FLF	100	Ap
5	9/21/2006	Bivins 2nd floor, copy area outside conference rm	Top of FLF	37mm	Ap - contact sample

Sampled by: Martin Bennett

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\*preferred sample collection area should be 100cm or greater

**Dust Samples** 

Materials Analytical Services

Micro-Vac Dust Sampling Chain-of-Custody

Project No.: 16090601 Date: 9/25/06

Location; Various Texas Bldds City/State: Houston and Ammarillo

Ø	9.00 8.00 9.00 9.00 9.00 9.00 9.00 9.00	111111111111111111111111111111111111111		Sample		
					STEEL COUNTRIES	
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7	2	9/19/2006 El Paso 21st Floor, adjacent to N2132A	Top of FLF supply duct	100	THD:	-
<u>~</u>	က	9/19/2006 El Paso 17th Floor, adjacent to S1704A	Top of HVAC Duct	100	FD	
Y	4	9/19/2006 El Paso 17th Floor, elevator lounge area	Top of partion wall nxt to sofa	100	Ap	
<i>\</i>	'n	9/19/2006 El Paso 12th Floor, adjacent to E1244A	Top of FLF supply duct	100	FD	
9	Ģ	9/19/2006 El Paso 6th Floor, adjacent to S601	Top of HVAC Duct	100	C L	
M	7	9/19/2006 El Paso 25th Floor, elevator lobby - northside	Top of wall sconce	100	Ap	
<u>0</u>	ω	9/19/2006 El Paso B Floor, tunnel at El Paso display case	Top of display case	100	Пр	
	න	9/20/2006 El Paso 10th Floor, in W1011B	Top of foll wrapped HVAC duct	37 mm	Fp - contact sample	
	10	9/20/2006 El Paso 6th Floor, in S603B	Top of FLF supply duct	37 mm	Fp - contact sample	
	11	9/20/2006 El Paso 1st Floor, in pipeshaft adj to stairwell D	Top of metal HVAC duct	.37 mm	Fp - contact sample	
. (						
2	<b>,</b>	9/20/2006 PWB 20th Floor Fresh Air Shaft NE Corner	Top of metal pipe	100	FD	
Ó	2	9/20/2006 PWB 6th Floor Annex Inside wall Chase	Top of metal pipe	100	ΉĐ	
1	-	9/21/2006   AAT Concourse 30 2nd floor, Airport Storage	Top of FLF	100	Fp	
	7	aße	Top of FLF	37 mm	Fp - contact sample	
1	က	9/21/2006 AAT B floor, Mechanical.Rm (supply area)	Top of Storage Shelf	100	ED.	•
	4		Top of Storage Shelf	37 mm	Fp - contact sample	
N	ည	9/21/2006 AAT B floor, Hallway outside Womens's RR	Top of FLF	100	Fp	
Ź	ဖ	9/21/2006 AAT 3rd floor, Mens Restroom	Top of HVAC duct	100	Fp	
5	-	9/21/2006 Bivins B floor, in janitors storage area off hallway	Top of metal HVAC duct	100	Ap	
	2		Top of metal HVAC duct	37mm	Ap - contact sample	
او	<sub>ص</sub>	9/21/2006 Bivins 1st Floor, City Counsel Chambers	Top of 2X4 lay-in ceiling tile	100	Ap	
7	4	9/21/2006 Bivins 2nd floor, copy area outside conference rm	Top of FLF	100	Ap	
	5	9/21/2006 Bivins 2nd floor, copy area outside conference rm	Top of FLF	37mm	Ap - contact sample	
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Sampled by:Martin Bennett

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# MATERIALS ANALYTICAL SERVICES PROJECT COC

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Conc	dition:	goodc			_				
CONT	ACT INFOR	MATION:							
Conta	act:	Martin Dies			Work	Phone:	(409) 883-4	4394 Ext:	
Title:	First Name	e Last Name:		Suffix	Other	Phone		Ext:	
Mr.	Martin	Dies			Fax:	(409) 88	3-4814		
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**Contact Samples** 

Materials Analytical Services

Micro-Vac Dust Sampling Chain-of-Custody

Project No.: 16090601 Date: 9/25/06

Location: Various Texas Bldgs City/State: Houston and Ammarillo

1 9/19/2006 EI Paso 24th Floor, add 3 9/19/2006 EI Paso 17th Floor, add 3 9/19/2006 EI Paso 17th Floor, add 3 9/19/2006 EI Paso 17th Floor, add 6 9/19/2006 EI Paso 17th Floor, add 6 9/19/2006 EI Paso 6th Floor, add 7 9/19/2006 EI Paso 25th Floor, add 9/19/2006 EI Paso 25th Floor, add 9/19/2006 EI Paso 10th Floor, tunne 2 9/20/2006 EI Paso 10th Floor, in Signature 2 9/20/2006 EI Paso 10th Floor, in Display 20/2006 EI Paso 10th Floor, Mechanic 2 9/21/2006 AAT B floor, Mechanic 2 9/21/2006 AAT B floor, Hallway o	acent to W2412B acent to N2132A acent to S1704A vator lounge area acent to E1244A cent to S601 vator lobby - northside 1 at El Paso display case N1011B S03B	Top of HVAC Duct Top of FLF supply duct Top of HVAC Duct Top of partion wall nxt to sofa Top of FLF supply duct Top of FLF supply duct Top of HVAC Duct Top of Mall sconce Top of display case Top of display case Top of foil wrapped HVAC duct Top of FLF supply duct	100 100 100 100 100 100 100 37 mm	Рр Рр Рр Рр
	t to N2132A t to S1704A lounge area t to E1244A to S601 lobby - northside Paso display case 1B	Top of FLF supply duct Top of HVAC Duct Top of partlon wall nxt to sofa Top of FLF supply duct Top of HVAC Duct Top of wall sconce Top of display case Top of foil wrapped HVAC duct Top of foil wrapped HVAC duct	100 100 100 100 100 37 mm	Fp Fp Ap Fp Fp
	to S1704A lounge area to E1244A to S601 lobby - northside I Paso display case 1B	Top of HVAC Duct Top of partion wall nxt to sofa Top of FLF supply duct Top of HVAC Duct Top of wall sconce Top of display case Top of foil wrapped HVAC duct Top of foil wrapped HVAC duct	100 100 100 100 100 37 mm	Ap Pp Fp Fo
	lounge area t to E1244A to S601 lobby - northside 1Paso display case 1B	Top of partion wall nxt to sofa Top of FLF supply duct Top of HVAC Duct Top of wall sconce Top of display case Top of foil wrapped HVAC duct Top of FLF supply duct	100 100 100 100 37 mm	Ap Fp Fp
	t to E1244A to S601 lobby - northside I Paso display case 1B	Top of FLF supply duct  Top of HVAC Duct  Top of wall sconce  Top of display case  Top of foil wrapped HVAC duct  Top of FLF supply duct	100 100 100 100 37 mm	д <del>т</del> од
	to S601 lobby - northside I Paso display case 1B	Top of HVAC Duct Top of wall sconce Top of display case Top of foil wrapped HVAC duct Top of FLF supply duct	100 100 100 37 mm	T <sub>D</sub>
	lobby - northside Paso display case 18 aft adj to stairwell D	Top of wall sconce Top of display case Top of foil wrapped HVAC duct Top of FLF supply duct	100 100 37 mm	The second secon
	1 Paso display case 1B aff adj to stairwell D	Top of display case Top of foil wrapped HVAC duct Top of FLF supply duct	100 37 mm	Ap
	1B aft adj to stairwell D	Top of foil wrapped HVAC duct Top of FLF supply duct	37 mm	Fp
	aft adj to stairwell D	Top of FLF supply duct	1	Fp - contact sample
	peshaft adj to stairwell D		37 mm	Fp - contact sample
		Top of metal HVAC duct	37 mm	Fp - contact sample
				-
	PWB 20th Floor Fresh Air Shaft NE Corner	Top of metal pipe	100	Fp
	PWB 6th Floor Annex Inside wall Chase	Top of metal pipe	100	Fp
	d floor, Airport Storage	Top of FLF	100	Fp
	d floor, Airport Storage	Top of FLF	37 mm	Fp - contact sample
		Top of Storage Shelf	100	Fp
	9/21/2006 AAT B floor, Mechanical Rm (supply area)	Top of Storage Shelf	37 mm	Fp - contact sample
	Vomens's RR	Top of FLF	100	Fp
6 9/21/2006 AAT 3rd	AAT 3rd floor, Mens Restroom	Top of HVAC duct	100	Fp
9/21/2006	Bivins B floor, in janitors storage area off hallway	Top of metal HVAC duct	100	Ap .
2 2 9/21/2006 Bivins B floor, in janitor	hallway	Top of metal HVAC duct	37mm	Ap - contact sample
	9/21/2006 Bivins 1st Floor, City Counsel Chambers	Top of 2X4 lay-in ceiling tile	100	Ap
4 9/21/2006 Bivins 2n	rence rm	Top of FLF	100	Ap
9/21/2006	Bivins 2nd floor, copy area outside conference rm	Top of FLF	37mm	Ap - contact sample
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Sampled by:Martin Bennett

\*preferred sample collection area should be 100cm² or greater

Date: Turnaround Time: X standard or rush

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## MATERIALS ANALYTICAL SERVICES PROJECT COC

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Subn	nitted By:	Martin Bennett				Docu	ments:	coc	
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1		Nancy Sears			c	omment	s for COC:		
Cond	lition:	good							
CONTA	ACT INFORM	IATION:							MARK 11-1
Conta	act:	Martin Dies			Work	Phone:	(409) 883-	4394	Ext:
Title:	First Name	Last Name:	S	Suffix	Other	Phone			_ Ext:
Mr.	Martin	Dies			Fax:	(409) 88	33-4814		
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# SECTION 3



Materials Analytical Services

Micro-Vac Dust Sampling Summary of Results

Project No.: 16090601 Date: 9/25/06

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	Samole				6 (3) (3) (3) (3)		Relative Contamination
Sample #		General Sample Location	. Sample Surface	Counted	Strict	Str Sm?	
-	9/19/2006	El Paso 24th Floor, adjacent to W2412B	Top of HVAC Duct	101	8.99×10 <sup>9</sup>	9.67×10 <sup>6</sup>	FP - Extreme
2	9/19/2006	El Paso 21st Floor, adjacent to N2132A	Top of FLF supply duct	108	8.54×10³	9,19x10 <sup>6</sup>	FP - Extreme
3	9/19/2006	9/19/2006 El Paso 17th Floor, adjacent to S1704A	Top of HVAC Duct	45	2.94×10 <sup>9</sup>	3.17×10 <sup>6</sup>	FP - Extreme
4	9/19/2006	9/19/2006  티 Paso 17th Floor, elevator lounge area	Top of partion wall nxt to sofa	13	1.85×10 <sup>7</sup>	1.99x10 <sup>4</sup>	AP - Moderate
5	9/19/2006	9/19/2006 El Paso 12th Floor, adjacent to E1244A	Top of FLF supply duct	99	9.00×10³	9.69×10 <sup>6</sup>	FP - Extreme
9	9/19/2006	9/19/2006 El Paso 6th Floor, adjacent to S601	Top of HVAC Duct	100	2.18×10 <sup>10</sup>	2.35×10 <sup>7</sup>	FP - Extreme
7	9/19/2006	El Paso 25th Floor, elevator lobby - northside	Top of wall sconce	16	8.87×10 <sup>7</sup>	9.55x10 <sup>4</sup>	AP - Moderate
8	9/19/2006	9/19/2006 El Paso B Floor, tunnel at El Paso display case	Top of display case	137	5.60×10 <sup>10</sup>	6.03×10 <sup>7</sup>	FP - Extreme
6	9/20/2006	9/20/2006 El Paso 10th Floor, in W1011B	Top of foil wrapped HVAC duct				
10	9/20/2006	9/20/2006 El Paso 6th Floor, in S603B	Top of FLF supply duct				
11	9/20/2006	El Paso 1st Floor, in pipeshaft adj to stairwell D	Top of metal HVAC duct				
1	9/20/2006	PWB 20th Floor Fresh Air Shaft NE Corner	Top of metal pipe	10	5.52×10 <sup>7</sup>	5.94×10 <sup>4</sup>	FP - Moderate
2	9/20/2006	PWB 6th Floor Annex Inside wall Chase	Top of metal pipe	76	1.15×10 <sup>10</sup>	1.23×10 <sup>7</sup>	FP - Extreme
1	9/21/2006	9/21/2006 AAT Concourse 30 2nd floor, Airport Storage	Top of FLF	116	1.28×10 <sup>10</sup>	1.38×10 <sup>7</sup>	FP - Extreme
2	9/21/2006	AAT Concourse 30 2nd floor, Airport Storage	Top of FLF				
3	9/21/2006	9/21/2006 AAT B floor, Mechanical Rm (supply area)	Top of Storage Shelf	98	1.16x10 <sup>11</sup>	1.25x10 <sup>8</sup>	FP - Extreme
4	9/21/2006	9/21/2006 AAT B floor, Mechanical.Rm (supply area)	Top of Storage Shelf				
2	9/21/2006	AAT B floor, Hallway outside Womens's RR	Top of FLF	101	1.12×10 <sup>10</sup>	1.20×10 <sup>7</sup>	FP - Extreme
9	9/21/2006	9/21/2006 AAT 3rd floor, Mens Restroom	Top of HVAC duct	64	7.38×10 <sup>9</sup>	7.94×10 <sup>6</sup>	FP - Extreme
7	9/21/2006	Bivins B floor, in janitors storage area off hallway	Top of metal HVAC duct	51	2.81×10 <sup>3</sup>	3.03×10 <sup>6</sup>	AP - Extreme
2	9/21/2006	9/21/2006 Bivins B floor, in janitors storage area off hallway	Top of metal HVAC duct				
3	9/21/2006	9/21/2006 Bivins 1st Floor, City Counsel Chambers	Top of 2X4 lay-in ceiling tile	30	3.51x10 <sup>9</sup>	3.78×10 <sup>6</sup>	AP - Extreme
4	9/21/2006	Bivins 2nd floor, copy area outside conference rm	Top of FLF	73	9.96×10 <sup>10</sup>	1.07×10 <sup>8</sup>	AP - Extreme
5	9/21/2006	9/21/2006 Bivins 2nd floor, copy area outside conference rm	Top of FLF				

# SECTION 4

**Dust Samples** 

#### TEM DUST ANALYSIS M40633

Dies and Hile, LLP Houston and Amaril	lo	CI	ient Sample ID:	0
Sample Areal Volume: Filter Type: Pore size: Effective Filter Area: Sample type: Analysis type: Grid Acceptance	0 Liter MCE 47mm 0.45 1297 Dust Dust Yes 1%	Acce	Date Analyzed: Analyst: Scope Number: elerating Voltage: Indicated Mag: Screen Mag: Grid_box:	10/11/2006 Kevin Simpson 3 100 KV 25 KX 20 KX 7186
Str < 5um: 0 Str ≥5um: 0 Total Str: 0	Number of grids: 2 Number of openings: 10	#1: 105  #3: 106 #2: 103  #4: 104	Average Grid Total Area Analy	<del></del>
Total Str: 0  Volume Filtered 50 ml  Dilution Factor 0	Str / sqr ft Str / sqr ft >=5	0.000E+00 0.000E+00		n2 0.000E+00 =5 0.000E+00
Str#: SquareID: Type:	Structure: Length Width	Morph: SAEI	D: EDS: Photo:	Sketch:
A6-F10	NSD			
F9	NSD			
F8	NSD			
F7	NSD			
F6	NSD			
E5-C9	NSD			
C8	NSD			
C7	NSD			
C6	NSD			
. <b>C</b> 5	NSD		∐ ∐ M4063	□ 33 000

C - Chrysotile

NSD - No Structure Detected

TR - Tremolite CR - Crocidolite F - Fiber

B - Bundle

AN - Anthophyllite

M - Matrix

AC - Actinolite

# El Paso Building 1001 Louisiana Street

## TEM DUST ANALYSIS M40633 001

Dies and Hile Houston and		ilo				Clier	it Sample l	D:	EIP	aso 1
Sample Areal Vo	olume: Type: e size: Area: type:	100 cm2 MCE 47mm 0.45 1297 Dust Dust YES	2 5 %			S Accele	Date Analy Anal Scope Num rating Volt Indicated N Screen M Grid_I	yst: ber: age: Aag: Aag:	MDN	17/2006 MOUNT 2 100 KV 25 KX 20 KX 7195
Str < 5um: 79 Str ≥ 5um: 22			ber of gride of opening			: <u>92</u> : 92	Averag Total Are		in , , ann ,	0.008464 0.06 <b>8</b>
Total Str: 101	0.2 m)		Str / so		8.987E+09		St	r / cı	m2 9.	673E+06
Dilution Factor	500	Str /	sqr ft	>=5	1.957E+09	· · · ·	Str / cn	n2 >	=5 2.	107E+06
Str#: SquarelD:	Туре:	Structure:	Length	Width	Morph:	SAED:	EDS:	Photo:	Sketch:	
1 E10-D5	С	С-В	20.00	0.20	x	M25803	<b>~</b>	ij.	[7]	
2	С	M-F	4.00	0.05	x	x	V	,	F-1	
3	C	В	1.40	0.03	X	X	V	· 		
<b>4</b>	Ċ	В	1.20	0.10	x	x	V		!	
5	С	M-F	2.30	0.03	x	x	<b>.</b>	****	<del></del>	
6	c	C-F	10.50	0.03	X	x	V			
7	c	В	4.10	0.05	x	x	; <b>v</b> ;		;	
8	c	C-F	5.50	0.05	x		•			
9	<b>c</b> .	С-В	6.00	0.03	X	<b>. X</b>	****			
10	c	M-F	1.60	0.05	x	x				
11	C	M-F	15.00	0.05	x		<b>Y</b>		i.	
12	c	м-в	2.00	0.40	x					
13 F3	С	В	4.00	0.38	. <b>x</b>		#1 *1	£'		
:								1.41		

C - Chrysotile

NSD - No Structure Detected

TR - Tremolite CR - Crocidolite F - Fiber B - Bundle

AN - Anthophyllite

M - Matrix

AC - Actinolite

Str#:	SquareID:	Туре:	Structure:	Length	Width	Morph:	SAED:	EDS:	Photo:	Sketch:	
14		С	M-F	6.00	0.03	x					
15		C	F	6.40	0.05	x				O	
16		C	M-F	0.80	0.02	x					
17		C	C-F	10.00	0.05	x					
18		c	F	0.80	0.03	x					
19		С	В	3.00	0.10	x					
20		c .	С-В	3.00	0.20	x	x		1		
21		c	M-F	2.80	0.03	<b>X</b>		Z	J	]	
22		С	F	2.00	0.03	x				<u> </u>	
	***		M-F	1.60	0.05	x			F-1	i	
23	Н2	С							:		
24		Ċ	M-B	1.50	0.20	Х					
25		С	M-F	1.20	0.03	X		1.1		<u>:_</u> ]	
26		С	M-B	3.00	0.20	х		[ ]			
27		С	C-F	1.40	0.03	х			[ <u></u>	::	
28		С	В	5.00	0.20	X		<del></del>			
29		C	M-B	2.30	0.03	x		1.7	<del></del>	<u> </u>	
30		C	M-F	2.60	0.05	x	x	<b>Y</b>	·-·.	:	
31		С	₿	2.20	0.10	$\mathbf{x}_{1}^{2}$		1		1	
32		С	M-F	6.00	0.03	x				* ;	
33	Н5	C.	M-F	12.00	0.03	x			<u></u> :		
34		С	F	16.00	0.03	x			L.	·	
35		С	C-F	3.00	0.03	x		17.	<u>L.</u>	L	
i											

C - Chrysotile TR - Tremolite NSD - No Structure Detected F - Fiber

CR - Crocidolite

B - Bundle

AN - Anthophyllite

M - Matrix

AC - Actinolite

Str#:	SquareID:	Туре:	Structure:	Length	Width	Morph:	SAED:	EDS:	Photo:	Sketch:
36		С	F	5.00	0.03	X		Ĺ		
37		C	F	9.00	0.03	x	•			
38		c	M-F	3.00	0.03	x				
39		c	C-F	2.00	0.03	x		П		
40		c	C-B	4.00	0.10	x	x			
								✓		
41	19	€ '	C-B	1.20	0.10	Х				
42		C	С-В	16.00	0.20	X				
43		C	С-В	1.00	0.10	x				
44		C	В	2.60	0.20	x				
45		c	C-F	3.60	0.03	x				
46		c	С-В	1_20	0.10	x			O	
								<u> </u>		
47		С	В	3.20	0.20	х		<u> </u>		
48		С	C-F	1.20	0.05	х				
49		С	C-F	1.40	0.20	х			<u> </u>	1
50		c	F	1.20	0.03	<b>x</b>	x	<b>V</b>	5 1 Ts	77
51		AM	В	40.00	6.00	x	x			
52	E9-E3	C	с-в	2.00	0.20	x		✓	<b>Y</b>	<u></u>
		c	С-В	1.70	0.10	x		<u>:</u> :	123	<u></u>
53								1	1!	
54		C	F	2.20	0.05	Х			Li	
55		С	F	3.20	0.05	x		70 AMO AA	<u>L.</u> :	
56		c		1.50	0.05	x		11		
57		C	В	6.00	0.68	x				
					,,					<u> </u>

C - Chrysotile

NSD - No Structure Detected F - Fiber

TR - Tremolite
CR - Crocidolite

B - Bundle

AN - Anthophyllite

M - Matrix

AC - Actinolite

Str#:	SquareID:	Туре:	Structure:	Length	Width	Morph:	SAED:	EDS:	Photo:	Sketch:
58		С	M-F	1.20	0.03	Х				П
59		С	M-B	2.20	0.05	x		L)		
			_							
60		С	F	0.80	0.02	Х	<b>X</b>	V		
61		С	M-F	1.20	0.03	x		:::3		S
62		С	В	1.20	0.03	x				
		_	_							Ü
63		С	F	0.80	0.02	X		13	[]	
64		c	M-F	2.20	0.03	X		37.14		;
65	Н3	С	F	1.00	0.02	X				
										1 ::
66		С	F	1.20	0.02	Х		F		
67		c	M-F	0.80	0.02	x				
68		c	M-F	3.00	0.05	х		O	O	T
•									An even	
69		C	В	2.40	0.20	X		i. i	1,7	[7]
70		c	M-F	12.00	0.05	x	х			
71		С	C-F	1.20	0.03	Х		✓.	1	
								Li	[7]	
72		C	C-F	1.40	0.01	х		177		[
73		c	F	11.00	0.05	x			;····,	
74		С	C-F	1.70	0.03	Х		: 3		<b>:</b>
								1 :	6.1	£.
75		С	F	1.80	0.05	X	,			
76		С	F	0.80	0.02	X				
77		С	F	2.20	0.03	x				£2
.,		~			3.00				<u>.</u>	
78		Ċ	В	3.80	9.10	Х		L		!
79		c	С-В	3.00	0.03	x				
			•							

C - Chrysotile

NSD - No Structure Detected

TR - Tremolite CR - Crocidolite AN - Anthophylite F - Fiber B - Bundle M - Matrix

AN - Anthophylir AC - Actinolite

itr#: SquareID:	Туре:	Structure:	Length	Width	Morph:	SAED:	EDS:	Photo:	Sketch:		
80	С	M-F	1.40	0.05	Х	Х	V				
81	C	C-F	0.80	0.03	x		[ <b>Y</b> ]	ii			
							O	П			
82	С	C-F	0.80	0.02	х				ļШ		
83 15	С	F	0.80	0.02	x						
	-		• 00	0.03	37					·	
84	С	M-F	2.00	0.03	х		10	F.]			
85	C	C-F	1.00	0.03	x		# ** t	ri	11.1		
86	С	В	1.60	0.20	Х		177				
								[7]	: ]		
87	C	F	5.20	0.10	Х			Γ.	<u></u> ]		
88	C	M-F	1.00	0.03	x						
00	6	M-F	0.80	A 22	v			<u></u> :			
89	С	AT-L	0.80	0.03	х		11.1	1	<u> </u>		
90	C	M-F	7.00	0.05	X			· = =;			
91	С	С-В	1.40	0.10	X	x	: :		!		
							₹.				
92	С	M-B	3.80	0.05	Х			i			
93	C	M-F	1.20	0.03	х						
0.4	C	M-F	13.00	0.05	x				IJ		
94	С	341E.	13.00	0.05	^		e		D		
95	C	M-F	1.00	0.05	Х			,			
96	С	M-F	3.60	0.02	Х			* *			
								;	[7]		
97	C.	F	2.30	0.03	Х		:	; · · ·	<u>;                                    </u>		
98	c	F	1.20	0.03	x			er eg	7		
99	c	F	1.00	0.02	x				:		
							:	1.	: 1		
100	С	C-F	2,30	0.05	. X	**********	7.34				
101	С	C-F	1.50	0.05	X	x					
					•		V		[7]		

C - Chrysotile

**NSD - No Structure Detected** F - Fiber

TR - Tremolite CR - Crocidolite AN - Anthophyllite

B - Bundle

M - Matrix

AC - Actinolite

Str#: SquareID: Type: Structure: Length Width Morph: SAED: EDS: Photo: Sketch:

M40633 001

C - Chrysotile

**NSD - No Structure Detected** 

TR - Tremolite

F - Fiber

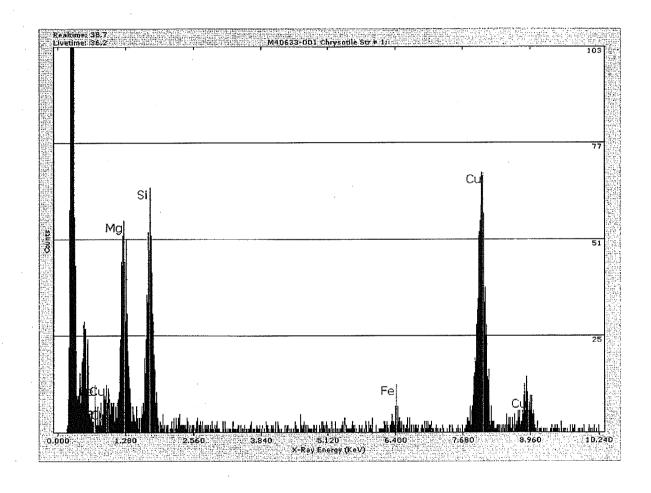
CR - Crocidolite

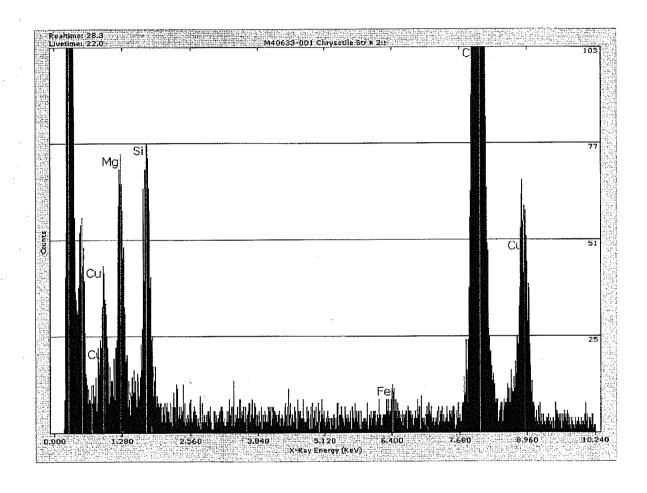
B - Bundle

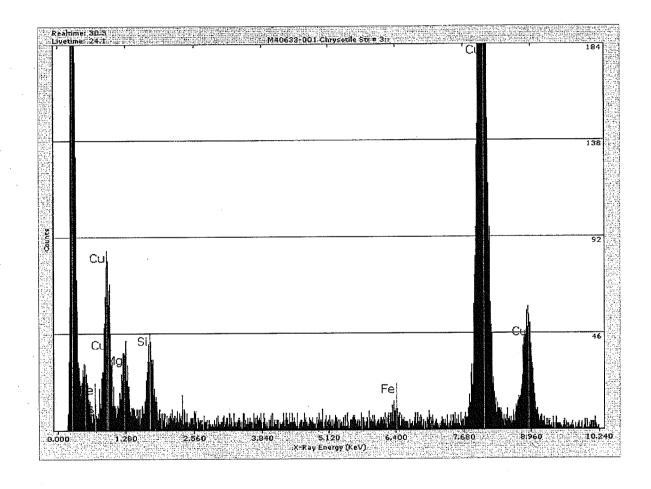
AN - Anthophyllite

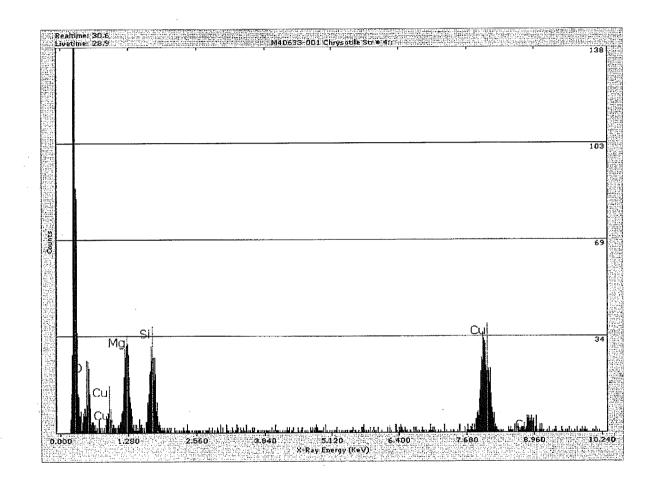
M - Matrix

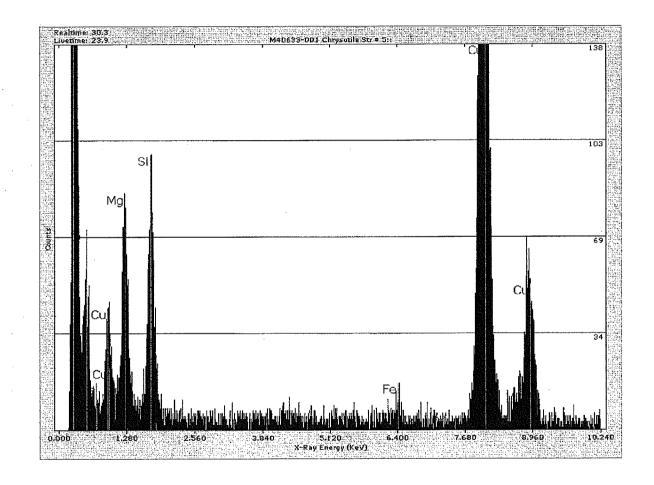
AC - Actinolite

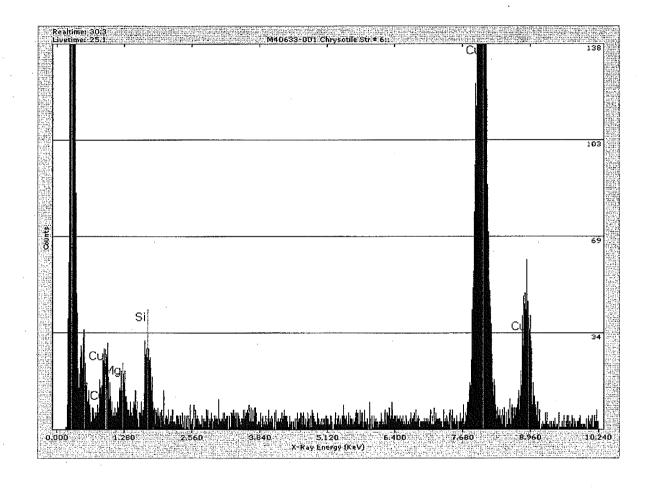


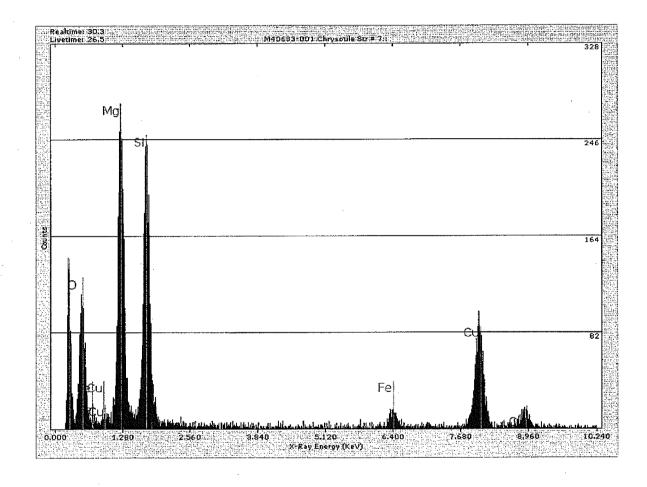


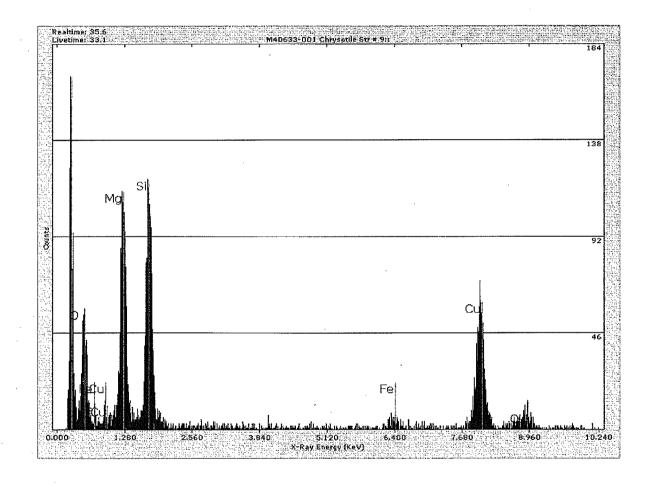


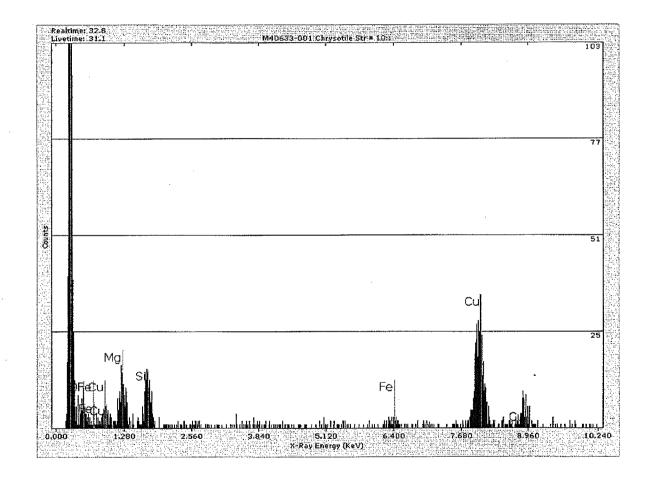


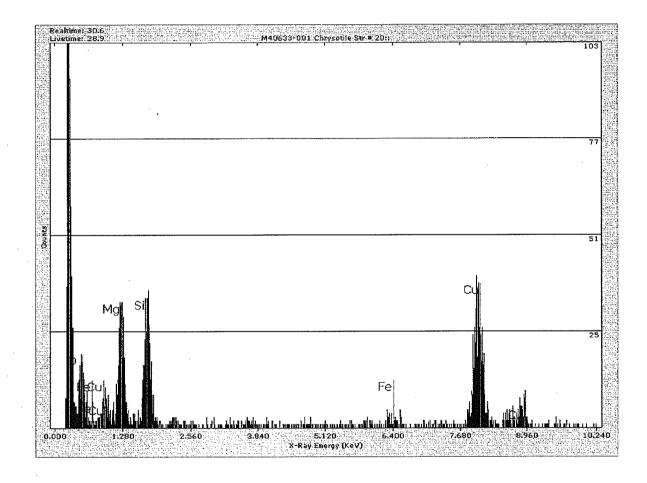


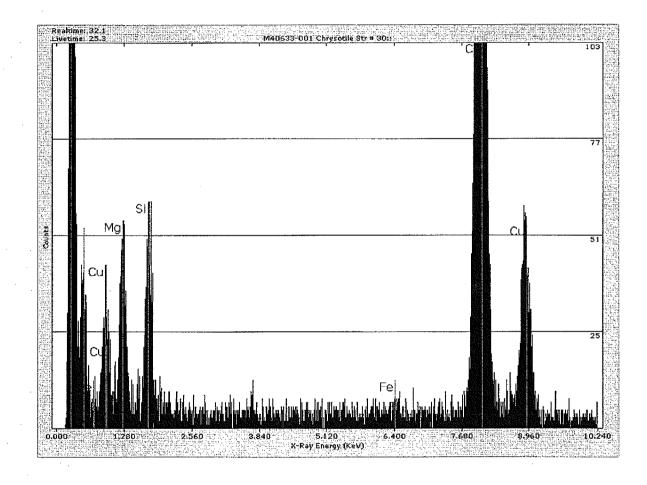


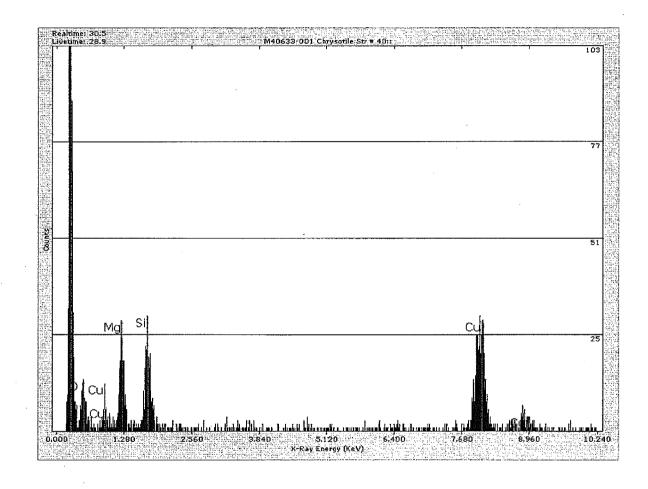


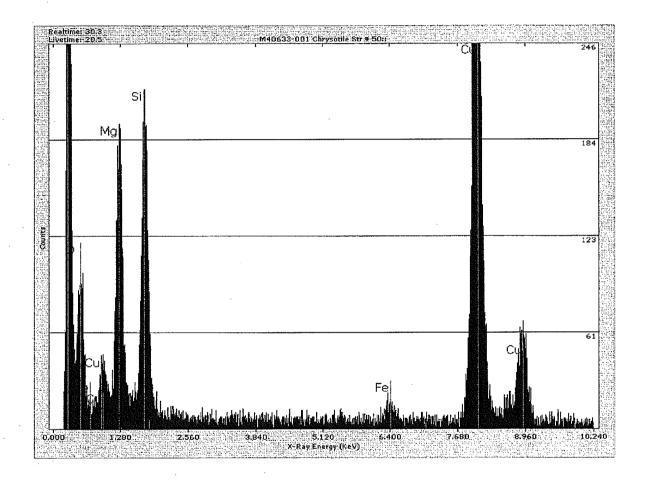


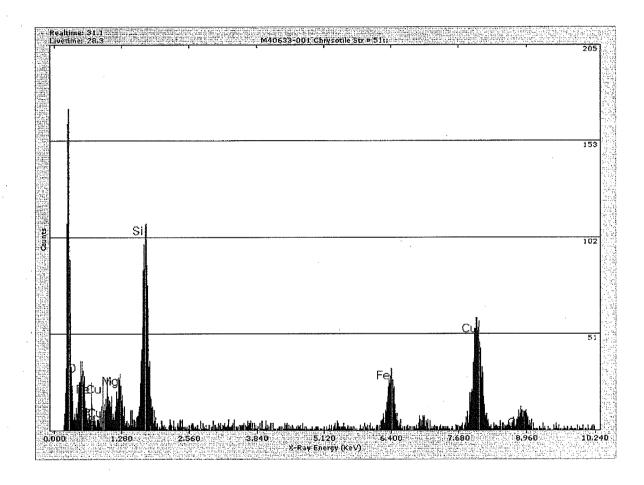


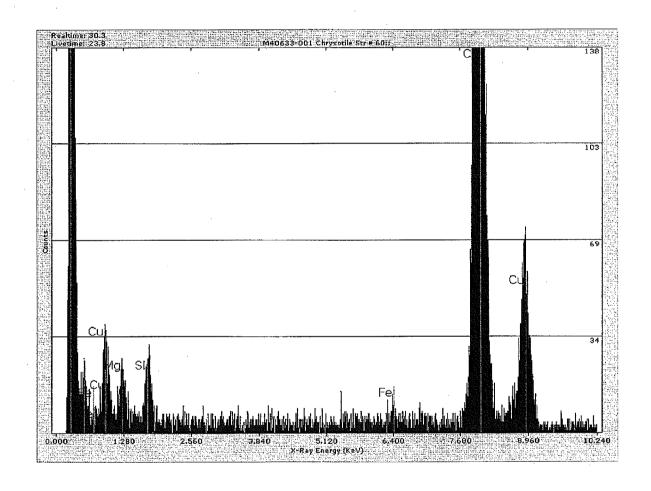


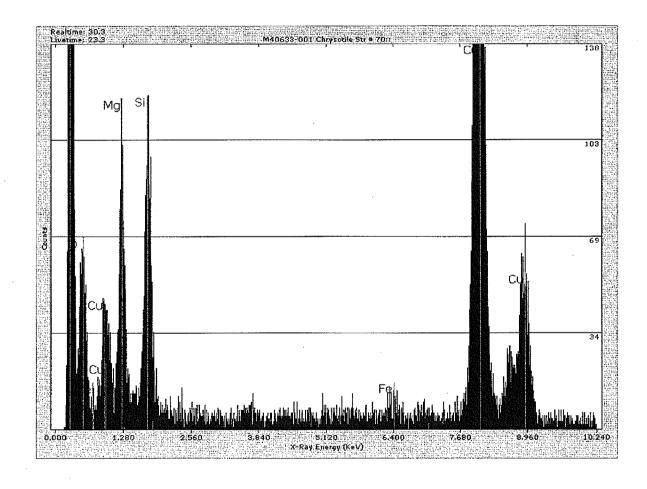


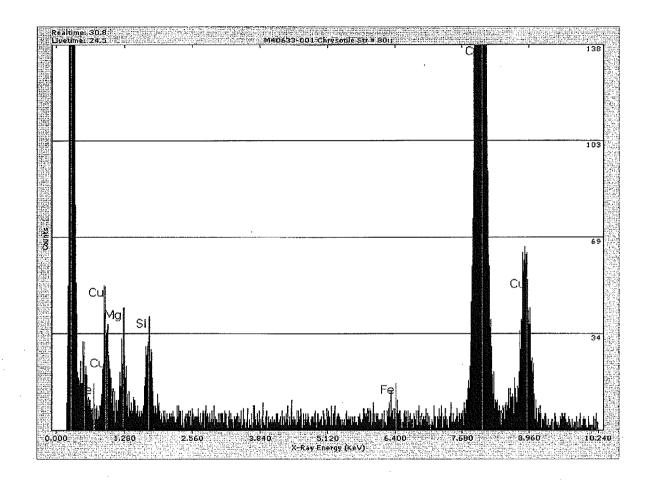


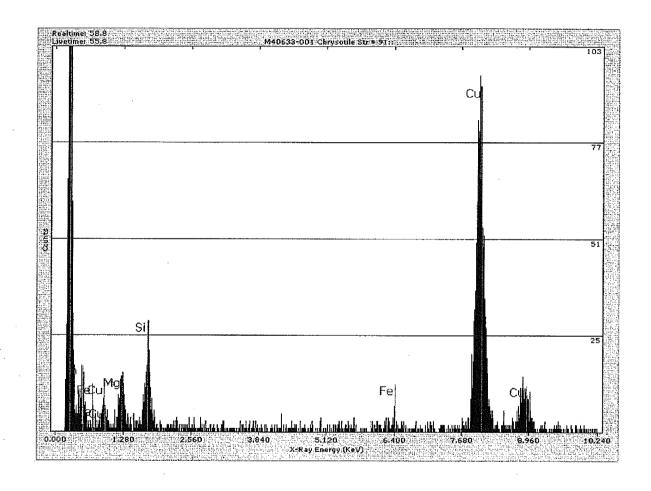


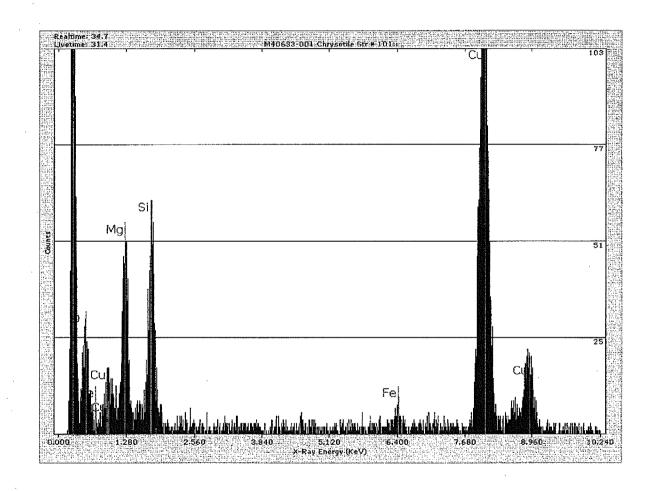












## TEM DUST ANALYSIS M40633 002

	Dies	and Hi	le, LLP									_	
	Hous	ston an	d Amaril	llo				Clie	nt Sample	iD:	EГР	aso 2	
-	Sample Area/ Volume: Filter Type: Pore size: Effective Filter Area: Sample type: Analysis type: Grid Acceptance			100 cm2 MCE 47mm 0.45 1297 Dust Dust YES 5 %					Date Analyzed: Analyst: Scope Number: Accelerating Voltage: Indicated Mag: Screen Mag: Grid_box:			10/18/2006  MDMOUNT  2  100 KV  25 KX  20 KX  7195	
S	Str < 5um: 59 Str ≥ 5um: 49 Total Str: 108				ber of gri of openin	† energy comme		3: <u>92</u> 4: <u>92</u>	Avera Total Ar	ge Grid ea Anal	i	0.008464 0.076	
•	olume F		0.2 ml		Str / s	sqr ft	8.542E+0	9	S	tr / cı	m2 9.	194E+06	
Đ	ilution 1	Factor	500	Str /	sqr ft	>=5	>=5 3.875E+09		Str / cr	n2 >	>=5 4.171E+06		
PROCE.	Str#:	SquareID:	Туре:	Structure:	Length	Width	Morph:	SAED:	EDS:	Photo:	Sketch:		
	I	D10-D4	c	M-F	3.00	0.03	x	M25807	<u>.</u>				
	2		С	C-F	8.00	0.05	x	x	<b>Y</b>	90 m	and a second		
	3		С	C-B	15.00	0.05	x	x	<b>V</b>				
	4		С	M-F	4.00	0.03	x	x	<b>∵</b>	1			
	5		c	C-F	3.00	0.10	x	x	<u>.</u>	:			
	6		c	M-F	6.00	0.03	x	x	<u></u>				
	7		C	M-F	1.80	0.03	x	x					
	8		C	C-B	7.00	0.10	x	x	<b>⊻</b>				
	9		c	С-В	3.40	0.10	X	x					
	10		С	M-F	20.00	0.05	x						
	11		c	м-в	11.00	0.10	x		. !				
	12		c	F	3.60	0.03	x		<u> </u>				
	13	<b>D</b> 7	c	В	2.20	0.20	X		i .				

C - Chrysotile

NSD - No Structure Detected

TR - Tremolite

F - Fiber

CR - Crocidolite

B - Bundle

AN - Anthophyllite

M - Matrix

AC - Actinolite

Str#:	Square1D:	Туре:	Structure:	Length	Width	Morph:	SAED:	EDS:	Photo:	Sketch:
14		С	F	8.00	0.05	X				
15		c	F	2.20	0.03	x				
16		c	M-B	2.00	0.20	x				
									-	
17		Ċ	M-F	15.00	0.08	X				
18		c	В	3.50	0.12	x				
19		C	M-F	1.20	0.03	· x				
20	<b>G</b> 7	C	F	2.00	0.03	x	x			
20	σ,		•	2.00	0.03			~	П	
21		C	В	22.00	0.05	X			Γ.	
22		c	В	1.30	0.05	x				
23		c	M-F	2.50	0.05	x				) 1 1 1
									<u> </u>	
24		C	В	10.00	0.20	<b>X</b>				
25		C	F	12.00	0.05	X			-	
26		c	В	7.80	0.15	x				
27		С	F	4.20	0.02	x				<u> </u>
				•					D	
28	Н3	С	F	0.80	0.02	X			<u> </u>	
29		c	F	14.09	0.12	X				
30		С	С-В	32.00	0.10	x	x	IJ		
31		С	C-F	14.00	0.05	x		<b>Y</b>	!	77
J,				14.00	0.03	Α.		$\Box$		
32		С	F	5.20	0.05	Х		Г	; <del></del> -	<del>[_]</del>
33		c	м-в	12.00	0.20	x			··	
34		c	C-B	1.00	0.05	x		<u> </u>	<del>[ ]</del>	10 ·
25		C	В	4.00	0.20	v		<u> </u>		;
35		С	В	4.00	0.20	x		J		,

C - Chrysotile TR - Tremolite NSD - No Structure Detected

CR - Crocidolite

F - Fiber

AN - Anthophyllite

B - Bundle

AC - Actinolite

M - Matrix C - Cluster

Str#:	SquareID:	Type:	Structure:	Length	Width	Morph:	SAED:	EDS:	Photo:	Sketch:
36		C	C-B	3.00	0.20	Х				
37	F3	С	F	1.20	0.02	x				
38		c	M-F	4.00	0.10	x				
30		·	<b></b> .	4100	U.10					
39		С	м-в	1.20	0.20	X				
40		C	M-F	2.00	0.03	x	x			
41		c	В	1.50	0.30	x		~	П	
42		c	M-F	6.00	0.05	v				
42		C	IVI-T	6.00	0.05	x		<u>.</u>	П	
43		С	F	10.00	0.05	X		$\Box$		
44		С	F	3.00	0.01	X				
45		c	C-F	9.00	0.05	x			Γ.:	
									Ĺ	
46		c	F	7.80	0.05	X				
47		C	F	3.60	0.03	X				<u>.                                    </u>
48		c	м-в	10.00	0.20	x				
49		c	M-B	10.50	0.30	x		1]		
								<u> </u>		
50		С	C-B	2.00	0.20	Х	Х	<b>y</b>	. [	
51		c	В	1.80	0.10	X				\$ 15.
52		С	M-F	13.00	0.10	x		1.3		Li
53		c	C-B	21.00	0.20	x				
33		·	U-B	21.00	0.20	Α		<del></del> j		D
54	E9-D4	c	C-B	4.00	0.03	X			$\Box$	
55		С	C-F	2.40	0.03	x				
56		c	F	2.60	0.02	<b>X</b>		7		П
		_						П	П	
57		С	F	1.70	0.03	X				
l					*****					

C - Chrysotile TR - Tremolite CR - Crocidolite

F - Fiber

AN - Anthophyllite

B - Bundle

NSD - No Structure Detected

M - Matrix

AC - Actinolite

Str#:	SquareID:	Туре:	Structure:	Length	Width	Morph:	SAED:	EDS:	Photo:	Sketch:	
58		С	C-F	1.40	0.02	X		Ù	L		
59		С	С-В	8.00	0.05	x					
60		c	C-B	30.00	0.05	x	<b>x</b>				
00		Č	<b>0</b> -15	30.00	0.05	•		V			
61		C	M-B	7.20	0.20	Х					
62		c	M-B	10.00	0.10	x					
63		c	C-F	5.50	0.03	x		نا		<u>1_1</u>	
64		c	F	0.80	0.03	<b>x</b>			[]		
04		C	Г	0.80	0.03	*					
65	<b>D</b> 7	C	F	10.00	0.05	X					
66		c	F	3.00	0.05	x					
67		c ·	F	1.00	0.05	x				l-ad	
		_									
68		С	В	6.90	0.10	х					
69		С	С-В	3.20	0.05	x					
70		c	M-F	1.80	0.03	x	x				
71		С	С-В	14.00	0.20	x		<b>y</b>			
									O		
72		С	M-F	11.00	0.03	X		[7]	$\Box$	<u> </u>	
73		C	M-F	30.00	0.05	X		r :			
74		C	В	2.40	0.20	x					
75		c	M-F	1.60	0.10	x		; - ;			
								D			
76	G7	С	В	18.00	0.20	х					
77		c	M-F	10.00	0.05	x		:13		Li	
78		С	F	1.20	0.05	x					
79		С	C-F	16.00	0.10	x		; :_;			
17			<b>Q-1</b>	10.00	v.IV	Λ		: ::	ا ا		

C - Chrysotile TR - Tremolite NSD - No Structure Detected

CR - Crocidolite AN - Anthophyllite M - Matrix

F - Fiber B - Bundle

AC - Actinolite

Str#:	SquareID:	Туре:	Structure:	Length	Width	Morph:	SAED:	EDS:	Photo:	Sketch:	
80		C	С-В	8.00	0,20	X	х	:::2			
81		С	F	5.60	0.10	X		<u> </u>			
								П			
82		С	В	1.49	0.10	X				[]	
83		C	C-F	16.00	0.03	X					
84		С	М-В	2.80	0.20	X					
85		С	M-F	2.20	0.03	X		[7]			
86		С	м-в	4.40	0.05	x					
87		C	C-F	12.00	0.05	x				-	
· ·		Č	<b>U</b> -1	12.00	0.00	А		D			
88		С	M-F	16.00	0.03	x					
89	G4	С	В	1.00	0.20	X					
90		С	M-F	8.00	0.03	x	v				
20		C	5 <b>9</b> 1-7	a.uu	0.03	Λ	Х	✓	500	<u> </u>	
91		С	В	2.50	0.25	X		ľ.	: ***	(i)	
92		c	В	32.00	0.10	x					
93		С	В	<b></b>	0.70			1	<u>:</u> :		
73		C	ь	6.00	0.30	x					
94		С	F	1.40	0.03	X		<u>[</u>	<del></del> ;		
95		C	В	2.29	0.10	x			ŧ		
0.0			0.5					:**)		173	
96		<b>C</b>	C-F	4.50	0.05	X	ı	!	,, ; b		
97		C	В	1.50	0.03	X	,				
98		С	C-B	40.00	0.10	<b>x</b> .					
								Ŀ.			
99	•	С	В	2.20	0.08	х		:			
160		C	В	13.00	0.20	x	x				
101		c	M-B	2.50	0.10	x		<b>⊻</b>	L		
•				2.00	0.10						

C - Chrysotile TR - Tremolite NSD - No Structure Detected

TR - Tremolite
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Str#:	SquareID:	Туре:	Structure:	Length	Width	Morph:	SAED:	EDS:	Photo:	Sketch:
102		c	F	3.80	0.03	X		:		
103		С	В	2.20	0.10	x		<del>;</del>		
104		С	M-F	2.00	0.05	x		12	L	F 1 1
105		C	F	1.20	0.05	x		F.,	17.3	<u></u>
106		C	M-F	10.50	0.10	x		<u></u>		
107		C	F	1.00	0.03	x			[7]	T)
108		С	M-F	1.80	0.03	x				
		٠							M406	

C - Chrysotile

NSD - No Structure Detected

TR - Tremolite

F - Fiber

CR - Crocidolite

B - Bundle

AN - Anthophyllite

M - Matrix

AC - Actinolite

